

# 3D RECONSTRUCTION SYSTEM AND METHOD UTILIZING A VARIABLE X-RAY SOURCE TO IMAGE DISTANCE

## Abstract of Disclosure

A medical imaging system comprises a C-arm unit having an x-ray source for generating x-rays and a receptor for obtaining image exposures from received x-rays. The C-arm unit moves the x-ray source and receptor along an image acquisition path between at least first and second exposure positions. The C-arm unit rotates about a central axis. Source and receptor brackets mount the x-ray source and receptor, respectively, to the C-arm unit. The source and receptor brackets move at least one of the x-ray source and receptor in a radial direction toward and away from the central axis of the C-arm unit to maintain a desired distance between the patient and the x-ray source and receptor. An image processor collects a series of image exposures from the receptor and constructs a three dimensional volumetric data set which is displayed on a display.

## Figures